

## AMENDMENTS TO THE SPECIFICATION

Please replace paragraphs [0053] and [0084] with the following paragraphs:

[0053] ~~Because the~~ The reaction pathway for a catalytic process depends on the properties of the materials, hence experimental kinetic data on new materials from the TC must be re-processed through steps (2) through (6) to investigate possible changes in reaction pathways and to update the kinetic hypothesis and the associated structure-property relationships.

[0084] The dependent variables are Y1 and Y2 and the independent variables are X1 through X21. There are no independent variables from the catalyst preparation or testing process in this example. The input data is shown in the Table illustrated in FIG. 6. Results of the recursive partitioning analysis are shown in Tables 7a and 7b.

**Tables 7a and 7b - Average Independent Variable (Descriptor) Usage Frequency in the Construction of 1000 Trees**